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U.S. Application Serial No. 10/770,917
 Attorney Docket: 71312-0202
 Reply to Office Action of November 28, 2005

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (CURRENTLY AMENDED) A curtain wall structure comprising:

horizontal mullions spaced a predetermined distance apart from each other, and vertical mullions spaced a predetermined distance apart from each other, wherein said horizontal and vertical mullions are connected together to form a frame having a plurality of openings therein;

support panels made of a light weight material connected to said frame, said panels extending across arranged within said openings and comprising a perimeter and a panel face, each of said support panels having an integral angled edge that extends around the perimeter thereof and is substantially normal to said panel face such that said panel face and said angled edge comprise a substantially L-shaped cross-section, said angled edge being adapted to provide rigidity to said panels, said support panel being secured substantially within said plurality of openings of said frame by said angled edge being coupled to said frame; and

tiles positioned on said frame, each of said tiles being adapted to be positioned on the panel faces ~~front side of said panels~~, wherein structural silicon is used to secure said tiles to said panels.

2. (CANCELED)

3. (ORIGINAL) The structure of claim 1, wherein said support panels have a front surface that extends substantially along the same plane as the front surface of said frame.

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4. (PREVIOUSLY PRESENTED) The structure of claim 1, wherein fasteners are used to secure said angled edge of said panels to said horizontal and vertical mullions.

5. (PREVIOUSLY PRESENTED) The structure of claim 1, in which each of said tiles has a perimeter and in which a space is defined between said tiles and said frame, wherein a gasket is provided between said perimeter of said tiles and said frame to seal said space between said tiles and said frame.

6. (PREVIOUSLY PRESENTED) The structure of claim 1, in which said frame includes an upper edge, a lower edge, an upper part and a lower part, wherein a top retainer is provided along said upper edge of said frame to retain the tiles that are located on said upper part of said frame, said top retainer being connected to said upper edge of said frame along one of said horizontal mullions, and wherein a bottom retainer is provided along said lower edge of said frame to retain the tiles that are located on said lower part of said frame, said bottom retainer being connected to said lower edge of said frame along another of said horizontal mullions.

7. (PREVIOUSLY PRESENTED) The structure of claim 1, in which a space is defined between adjacent tiles, wherein in said space between adjacent tiles there are provided gaskets or sealants to form a seal between said tiles and said frame.

8. (ORIGINAL.) The structure of claim 1, wherein each of said tiles has dimensions in the horizontal and vertical directions that are greater than the distances between the horizontal and vertical mullions, respectively, and wherein each of said support panels has dimensions in the horizontal and vertical directions that are substantially the same as the distances between the horizontal and vertical mullions, respectively.

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9. (ORIGINAL) The structure of claim 1, wherein said panels have a first predetermined thickness, and said tiles have a second predetermined thickness, wherein said second predetermined thickness is greater than said first predetermined thickness.

10. (ORIGINAL) The structure of claim 9, wherein each of said support panels has a horizontal edge portion extending around the perimeter that has a rearward dimension that is greater than said second predetermined thickness.

11. (ORIGINAL) The structure of claim 1, wherein said tiles are made of porcelain or ceramic material

12. (ORIGINAL) The structure of claim 10, wherein said tiles are no thinner than about three eighths of an inch thick, and said support panels are made of aluminum that is about one eighth inch thick

13. (CURRENTLY AMENDED) A curtain wall structure comprising:
horizontal and vertical mullions spaced apart from each other, wherein said horizontal and vertical mullions are connected together to form a frame having a plurality of openings therein;
support panels connected to said frame, each of said panels having substantially the same size and shape as said openings and being arranged within said openings, and having an integral perimeter edge extending normal to a front surface thereof such that said panel face and said angled edge form a substantially L-shaped cross-section, wherein said front surface of said panels extends along a plane that

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is substantially the same as or in front of the front surface of said frame, said panels being substantially fitted within said openings and coupled to said frame by said integral perimeter edge; and
tiles connected to said frame and said panels, wherein structural silicon is used to secure said tiles to said panels.

14. (PREVIOUSLY PRESENTED) The structure of claim 13, wherein each of said tiles is larger in the horizontal and vertical dimensions than said openings, and wherein said panels are connected to said frame along the perimeter edge thereof.

15. (CURRENTLY AMENDED) A method of forming a curtain wall comprising:
providing a frame having horizontal and vertical mullions spaced apart from each other, said horizontal and vertical mullions forming a plurality of openings therein, said frame having a front surface;
forming a plurality of support panels, each of said support panels having a perimeter, a panel face
and an integrated angled edge that extends around said perimeter, said angled edge being substantially
normal to said panel face such that said panel face and said angled edge comprise a substantially L-
shaped cross-section;

connecting said plurality of support panels made of a light weight material onto said frame substantially within said openings by attachment of said angled edge, said panels being positioned on said frame within said openings, wherein each of said panels has substantially the same size and shape as said openings, and ~~has a front surface~~ said panel faces that extends extending along a plane that is substantially the same as, or in front of, the front surface of said frame; and

applying structural silicon to said panels and attaching tiles onto said panels using said structural silicon.

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16. (NEW) The structure of claim 1, wherein said panel faces extend along a plane that is substantially the same as or in front of a front surface of said frame.
17. (NEW) The structure of claim 1, wherein said panel faces are substantially flush the frame.
18. (NEW) The structure of claim 17, wherein said light weight material comprises aluminum.
19. (NEW) The structure of claim 1, wherein said angled edge is coupled to said frame by a plurality of nuts and bolts.
20. (NEW) The structure of claim 19, wherein said panel faces are substantially flush the frame.
21. (NEW) The structure of claim 20, wherein said light weight material comprises aluminum.